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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,430	08/31/2001	Kishore C. Acharya	GEMS8081.096	9467
27061	7590	07/24/2008	EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (GEMS)			CATTUNGAL, SANJAY	
136 S WISCONSIN ST				
PORT WASHINGTON, WI 53074				
			ART UNIT	PAPER NUMBER
			3768	
			NOTIFICATION DATE	DELIVERY MODE
			07/24/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/682,430	Applicant(s) ACHARYA, KISHORE C.	
	Examiner SANJAY CATTUNGAL	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 4-36 have been considered but are not persuasive. Applicant argues that the cardiac phantom body of the Montgomery reference is not made of pliable material. Examiner would like to point out that Montgomery reference states that the Cardiac phantom body is made to mimic a normal heart and hence is made of pliable material. Therefore the rejection has not been overcome and is maintained and made final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 4-24 rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 5,634,797 to Montgomery.

4. Regarding **Claims 1 and 4-24**, Montgomery teaches a dynamic cardiac phantom comprising: a phantom body made of pliable material to expand and contract based on an injection and discharge of fluid therein, wherein the phantom body has a shape to simulate that of a heart, the phantom body further having a shell made of the pliable material and that defines a fluid chamber in a volume defined by an interior surface of the shell (Abstract, Col. 2 Lines 15-45 and Fig.16-28); a plurality of protrusions connected to the shell and in fluid communication with the fluid chamber, each of the

plurality of protrusions having a shape to simulate a respective chamber of the heart (Fig. 16-28); and at least one inlet connected to the shell at one end and fluidly connected to the fluid chamber, the at least one inlet having another end connectable to a fluid source to pass fluid to and from the fluid chamber and the plurality of protrusions in a manner to simulate cardiac motion. (Abstract, Col. 2 Lines 15-45 and Fig.16-28)

5. **Claims 25-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of U. S. Patent No. 6,498,828 to Jiang**

6. Regarding **Claims 25-36**, Montgomery teaches all of the above claimed limitations but does not expressly teach all the details of the CT scan system, or imaging via Mri, NM/PET scanner and x-ray scanner.

7. Jiang teaches a computed tomography system comprising: a rotatable gantry having an opening (Abstract and Fig. 2 element 30); a high frequency electromagnetic energy projection source to project high frequency energy toward an object (Abstract and Fig. 1); a scintillator array having a plurality of scintillators to receive high frequency electromagnetic energy attenuated by the object (Abstract); a photodiode array having a plurality of photodiodes, wherein the photodiode array is optically coupled to the scintillator array and is configured to detect light energy emitted therefrom (Fig. 4 element 52); a plurality of electrical interconnects configured to transmit photodiode outputs to a data processing system (Fig. 4); a computer to produce a visual display based upon the photodiode outputs transmitted to the data processing system (Fig. 2 element 36)

8. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Montgomery with a CT scan system taught by Jiang, since such a setup would result in a cardiac phantom imaging system where in one device could do all the functions of a cardiac phantom and image the phantom.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANJAY CATTUNGAL whose telephone number is (571)272-1306. The examiner can normally be reached on 9:30 - 5:00 pm.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3737

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian L Casler/
Supervisory Patent Examiner, Art
Unit 3737

SPC